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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/031,411	04/18/2002	Teresio Signaroldi	000035-044	2144

21839 7590 02/12/2004

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EXAMINER

MITCHELL, KATHERINE W

ART UNIT PAPER NUMBER

3677

DATE MAILED: 02/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/031,411

Applicant(s)

SIGNAROLDI ET AL.

Examiner

Katherine W Mitchell

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 and 22-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 and 22-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 1-18-2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 8.
- ☐ Interview Summary (PTO-413) Paper No(s). _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Examiner apologizes for the delay in processing this application. Applicant's representative has been very cooperative.

Information Disclosure Statement

1. The information disclosure statements (IDS) submitted on 18 April 2002, 14 Feb and 9 Sept 2003 were filed timely. Examiner appreciates applicant's resubmission of clean IDS papers, and duplicates of references to replace papers lost in the application handling process. Accordingly, the information disclosure statements have been considered by the examiner and "clean copes" are being initialed and returned by examiner.

Double Patenting

2. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

3. Claims 1-4 and 22 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 8 and 11-14 respectively of copending Application No. 10/361856. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

4. The terminal disclaimer over US 6524030 has been entered and overcomes the nonstatutory double patenting rejection of the last office action.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-6 and 22-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Nolan Jr, DE 2118360, hereafter called Nolan. Examiner is providing applicant with a translation, as the document was cited on the IDS without a translation, and all page and line numbers refer to this translation.

Re claims 1 and 22-23: Nolan teaches a pipe laying vessel and method comprising (page 3, 2nd, 6th, and 7th paragraphs, Figures) an upwardly extending tower (28,68) with a plurality of guiding element rollers (36), spaced along the pipeline path and defining lateral path limits, located such that the rollers allow some bending of the pipeline as it passes thru the lower guide arrangement (page 5, last 2 paragraphs – top 2 paragraphs page 6, figures, paragraph noted /25 on page 11).

Re claim 2: Guide rollers including axes of rotation inclined toward one another in a plane perpendicular to the tower, are taught in Fig 6.

Re claims 3-4 and 6: Guide rollers freely rotatable on bearings and extending at least ¼ revolution, and/or substantially all around the path of the pipeline are shown in

Figs 9 (176, 178, 180) and Fig 10 (36) as well as discussed on page 11 1st two paragraphs and claim 9, page 25.

Re claim 5: A flared tower as described is shown in Fig 3.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 7-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nolan in view of standard bearing design. Nolan teaches all the elements except resilient bearings. Examiner takes Official Notice that resilient bearings are a known bearing design and the choice of bearing properties would be a design choice based on application parameters. It would have been obvious to one of ordinary skill in the art, having the teachings of Nolan and ordinary skill in the art before him at the time the invention was made, to modify Nolan to include resilient bearings displaceable a distance as required in order to obtain bearings suitable for real-world conditions that do not lock up or prematurely fail when forces not parallel to the bearing axis are applied. One would have been motivated to make such a combination because longer life and lower costs would have been obtained, particularly important when at sea where unlimited spare parts are not available.

9. Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nolan in view of common knowledge in the art.

Re claims 12-14: Adjustable tower inclination is taught in pages 10-12, 19-20 and Figs 12a-12d and claim 11. Once the tower inclination is suitable, it is obviously fixed in place as shown in Figs 12a-12d. The exact angle of incline would be a design choice based on application parameters. Note that Figs 12a-12d obviously show an angle between 45-90 degrees to the horizontal. It would have been obvious to one of ordinary skill in the art, having the teachings of Nolan and ordinary skill in the art before him at the time the invention was made, to modify Nolan to include adjustable tower inclination as required in order to obtain pipe laying at different depths and for varying distances, which would result in angular differences. One would have been motivated to make such a combination because flexibility to adapt to site conditions would have been obtained, particularly important when at sea where site control is difficult to accurately predict or control.

10. Claims 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nolan in view of Smith US 3555835. As discussed above, Nolan teaches all the elements except guide rollers positioned below sea level. Smith shows in Figs 1,2, and 4 and col 3 lines 13-27 that multiple set of guide rollers (42,44,46) are evenly spaced and used below sea level to resist lateral movement and more easily form a curve when the pipe is being guided thru the water. The spacing would be determined by pipe diameter, laying radius, and site conditions. It would have been obvious to one of ordinary skill in the art, having the teachings of Nolan and Smith before him at the time the invention was made, to modify Nolan to include multiple guide rollers undersea as taught by Smith in order to resist lateral movement and more easily form a curve when

the pipe is being guided thru the water. One would have been motivated to make such a combination because sea currents and ship movement could result in problems without guide rollers in the water.

11. Claims 19-20 and 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nolan in view of Brown USP 4141667. As discussed above, Nolan teaches all the elements except guide rollers monitored for forces applied to the pipeline. Brown teaches that "any suitable conventional means" 22 may be used to monitor the side reactions on the pipe and pipe alignment, to ensure the pipe is laid in a straight line. The monitoring means is monitoring the rollers 20 as shown in the Figures. It would have been obvious to one of ordinary skill in the art, having the teachings of Nolan and Brown before him at the time the invention was made, to modify Nolan to include guide rollers monitored for forces applied to the pipeline as taught by Brown in order to insure pipe is laid straight and that excessive forces don't stress the pipeline. One would have been motivated to make such a combination because monitoring forces would prevent expensive maintenance problems later by allowing proactive adjustments to ensure proper pipe positioning and laying.

12. Claims 19-20 and 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nolan in view of Jones et al. USP 3668878. As discussed above, Nolan teaches all the elements except guide rollers monitored for forces applied to the pipeline. Jones et al. teaches that "v-shaped roller assemblies 85 may be provided with force monitoring load cells" in col 23 lines 56-60, to minimize pipeline stresses and tension. Col 53 lines 51-73 further described the benefits of monitoring forces to

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enhance operator control and prevent serious deviations in forces, and that the monitoring data can be used to adjust parameters to ensure proper pipe laying. It would have been obvious to one of ordinary skill in the art, having the teachings of Nolan and Jones et al. before him at the time the invention was made, to modify Nolan to include guide rollers monitored for forces applied to the pipeline as taught by Jones et al. in order to insure pipe is laid properly and that excessive forces don't stress the pipeline. One would have been motivated to make such a combination because monitoring forces would prevent expensive maintenance problems later by allowing proactive adjustments to ensure proper pipe positioning and laying.

Conclusion


13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Katherine W Mitchell whose telephone number is 703-305-6713. The examiner can normally be reached on Tues-Fri 9 AM - 7:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. J. Swann can be reached on 703-306-4115. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7687 for regular communications and 703-308-8623 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

kwm
February 2, 2004


ROBERT J. SANDY
PRIMARY EXAMINER